

ENTOMOLOGY.—*New species of American Lepidoptera of the families Limacodidae and Dalceridae.*¹ HARRISON G. DYAR, U. S. National Museum. (Communicated by AUGUST BUSCK.)

The species here mentioned will be discussed more fully in other places, but it is desirable to validate the names as soon as possible.

Family LIMACODIDAE

Genus APODA Haworth

Apoda maxima, new species

Fore wing ocher-brown to reddish brown, the terminal area slightly paler than the basal one, or not so; a dark, somewhat oblique line across the middle, edged with whitish without. Hind wing a shade lighter than fore wing. Expanse, male, 27 mm., female, 28 mm.

Male and female, Type No. 40665, U. S. Nat. Mus., Big Bend, Brewster County, Texas, 5000–7000 feet alt. (O. C. Poling, gift of F. Johnson).

Genus SIBINE Herrich-Schäffer

Section 1. *Anellus of male hypopygium with a dorsal chitinous tongue*

Sibine clarans, new species

Fore wing narrow, elongate, rather pointed; dark rufous brown, the veins, especially median and at base, blackish shaded; three white subapical dots, one small subbasal dot. Hind wing rosy whitish, inner area rosy brown. Expanse, male, 38 mm. Anellus with a horn on each side.

Two males, Type No. 40666, U. S. Nat. Mus., No. 860, Cornell University Coll., Yahuar Mayo, Peru, 1200 feet, alt., April, 1912 (Dognin Collection); El Campaniente, Col. Perene, Peru, June 14, 1920 (Cornell Univ. Exp.).

Sibine dorans, new species

Like *clarans*; a little less rufous. Male anellus without horns; spines of penis a wide mass of small ones.

Five males, Type No. 40667, U. S. Nat. Mus., La Oroya, Rio Inambari, Carabaya, Peru (Dognin Collection).

Sibine tontineans, new species

Similar to *clarans* and *dorans*, anellus without horns, spines of penis in a line, small at base, very large in the middle, small again at tip. Expanse, male 33–35 mm.

Two males, Type No. 40668, U. S. Nat. Mus., St. Jean du Maroni and Nouveau Chantier, French Guiana (Le Moul, Dognin Collection).

Sibine giseldans, new species

Like *tontineans*, but much smaller in size. Expanse, male, 29 mm. Spines of penis a mass of very long slender ones.

One male, Type No. 859, Cornell Univ. Coll., below Rio Negro, Amazonas, Brazil, September, 1920 (Cornell Univ. Exp.).

¹ Received November 12, 1927.

Sibine joyceans, new species

Fore wing trigonate, rather short, dark, less reddish than in *horrida*; dots white, the subapical ones consolidated in an oblique line; hind wings rather dark. Expanse, male, 30–33 mm., female, 40–43 mm. Spines of penis numerous terminally, small, the basal ones few and large.

Five males, two females, Type No. 40669, U. S. Nat. Mus., Panama (Busck and Zetek).

Sibine iolans, new species

Dark rufous brown as in *pallescens* Dogn. (= *rufescens* Walk.). Male without dots or markings. Hind wing pale rosy brown. Expanse, male 31–35 mm. Male hypopygium as in *nitens*, the spines of penis more slender and numerous.

Three males, Type No. 40670, U. S. Nat. Mus., Paramaribo, Surinam, May, 1904 (W. Schaus); Cayenne, French Guiana, June, 1904 (W. Schaus); French Guiana, 1900 (Pouillon).

Sibine norans, new species

Dark rufous brown without dots; hind wing dark brown. Male hypopygium as in *pallescens* (= *rufescens*), but the harpe finger-shaped at tip, oblique on one side. Expanse, male, 30–40 mm., female, 43–45 mm.

Eleven males, three females, Type No. 40671, U. S. Nat. Mus., São Paulo, Castro and Santa Catherina, Brazil; Paraguay (Schaus and Dognin Collections).

Sibine didactica, new species

Smaller than *norans*, similarly marked; two subapical and one subbasal white dots. Male aedoeagus a very narrow tube, much narrower than in *nitens*, etc.

One male, Type No. 40672, U. S. Nat. Mus., from the British Guiana Museum, presumably collected in that country.

Sibine ximenans, new species

Dark purple brown like *nitens*, the dots minute; hind wing very dark. Male hypopygium as in *joyceans*, the spines of penis numerous throughout, long and about alike. Expanse, male, 32 mm.

One male, Type No. 40673, U. S. Nat. Mus., Rio Tocantins, Brazil (Dognin Collection). Another male in the Cornell University Collection is not made an allotype because the number of spines of the penis is much less. La Merced, Rio Chamchamayo, Peru, June 3, 1920 (Cornell Univ. Exp.).

Sibine violans, new species

Rather large, dark shining purple brown; dots pale yellow, large, and tending to confluence. Hind wing dark red-brown, the scales purplish and raised between the veins. Expanse, male, 33–35 mm., female, 48 mm. Generally similar to *bonaerensis* Berg, larger and more brilliantly marked.

Two males, one female, Type No. 40674, U. S. Nat. Mus., Muzo, Medina, and Pacho, Colombia (A. H. Fassl, Dognin Collection).

Sibine helenans, new species

A small species, smooth dark purple brown. Expanse, male, 25–28 mm., female, 40–42 mm. Male hypopygium as in *bonaerensis* Berg, but the wing-shape different, the present species having pointed fore wings.

Three males, Type No. 40675, U. S. Nat. Mus., Rurrenabaque, Bolivia, October, 1922 (W. M. Mann, Mulford Biological Exp.); Teffé, Amazonas, Brazil, September (A. H. Fassel, Dognin Collection). Also 14 males and three females examined from the Cornell University Collection from various localities on the Amazon and from Corumba, Matto Grosso, Brazil.

Sibine priscillans, new species

Large, rather light rufous brown, with red stain subapically and sub-basally; single subapical and subbasal yellowish dots. Hind wing pale creamy. Expanse, male, 43 mm. Male hypopygium of the type of *violans*, *ximenans*, etc.

One male, Type No. 40676, U. S. Nat. Mus., Zacualpan, Mexico, November, 1914 (R. Muller, Dognin Collection).

Sibine laurans, new species

Blunt-winged, rather light purple brown, the fringe dark; a large orange-red shade along inner margin below a darker ray; no subapical marking, no dots. Expanse, male, 28 mm.

Two males, Type No. 40677, U. S. Nat. Mus., São Paulo Olivença, Amazonas, Brazil, November–December (A. H. Fassel, Dognin Collection).

Section 2. *Male anellus without dorsal chitinized tongue***Sibine reletiva**, new species

As in *extensa* Schaus; smaller, the spines of the male penis shorter but large and stout and followed by minute ones. Expanse, male, 30–35 mm., female, 40 mm.

Three males, one female, Type No. 40678, U. S. Nat. Mus., San Salvador, Central America (Dognin Collection).

Sibine ophelians, new species

As in *extensa*; blunter winged, somewhat less strongly marked and thinner scaled. Expanse, male, 30–35 mm., female, 46–50 mm. Hypopygium as in *reletiva*, the spines of penis fine, slender, not followed by minute ones.

Twelve males and three females, Type No. 40679, U. S. Nat. Mus., San Salvador, Salvador; Cayuga and Quirigua, Guatemala; Juan Vinas and Sixola River, Costa Rica (Schaus & Barnes); Lino, Panama; Pacho, Colombia (Dognin Collection).

Sibine gertrudans, new species

Blunt-winged, dark umber brown with little reddish tint; a blackish ray through cell and along submedian; dots obsolete. Hind wing purplish brown. Expanse, male, 30–35 mm. Hypopygium similar to *extensa*, the spines of the penis smaller. The wing-shape differs.

Eight males, Type No. 40680, U. S. Nat. Mus., Cuernavaca, Morelos, Mexico, July, August, November, December, 1906 (W. Schaus); Colima, Colima, Mexico, July, 1924 (R. Müller).

Sibine quellans, new species

Fore wing pointed, dark shining brown with contrasting areas; subbasal and subapical reddish stains, no dots. Hind wing rather dark brown. Expanse, male, 30 mm.

One male, Type No. 40681, U. S. Nat. Mus., San Antonio, Colombia, 5800 feet alt., December, 1907 (M. G. Palmer, Dognin Collection).

Sibine rollans, new species

Blunt- and square-winged; light rosy red-brown; a narrow blackish ray from base below cell, the inner area below it bronzy red. Hind wing rather brightly reddish brown. Expanse, male, 25-27 mm.

Eight males, Type No. 40682, U. S. Nat. Mus., St. Jean and St. Laurent, French Guiana (Le Moulton); Yahuar Mayo, Peru, April-May, 1912; Codajias, Coary and Tefé, Amazonas, all from the Dognin Collection. Also 9 males in the Cornell University Collection, not mounted, but agreeing superficially, Mackenzie, Demerara River, British Guiana, June 24, 1927; Tumatumari, Potaro River, British Guiana, June 27, 1927; Moengo, Cottica River, Surinam, May 23, 1927 (Cornell Univ. Exp.).

Sibine francesans, new species

Like *eucleides* Dyar, the wing even broader and squarer; a little less dark brown, the black ray under median vein more distinct. Expanse, male, 36 mm.

Two males, Type No. 40683, U. S. Nat. Mus., one without label, the other, Rio Songo, Bolivia (A. H. Fassl, Dognin Collection).

Sibine zellans, new species

Fore wing narrow, pointed, hind wing trigonate, the outer margin straight; dark purplish brown, no markings, the hind wing almost as dark as the fore. Expanse, male, 37 mm. Hypopygium with the two limbs of the aedoeagus irregular, one shorter than the other, the limbs quadrate, granular.

One male, Type No. 40684, U. S. Nat. Mus., Pará, Brazil (Moss).

Sibine berthans, new species

Like *zellans*, blacker, wings rather less pointed, the outer margin of hind wing convex. Female less intensely blackish, the ground brownish in places, a red apical stain, and subapical yellow streak on vein 6; hind wing lighter brown. Expanse, male, 34 mm., female, 54 mm. The spines of the penis are finer and more numerous than in *zellans*.

Male and female, Type No. 40685, U. S. Nat. Mus., Villa Rica, Paraguay, March, 1926 (F. Schade).

Sibine sarans, new species

Small, dark, blunt-winged, resembling *stimulea* Clem. Hypopygium as in *zellans*, but the limbs of aedoeagus slender, irregular. Expanse, male, 23 mm. Hypopygium much as in *pauper* Dyar.

One male, Type No. 40686, U. S. Nat. Mus., San Sebastian Retalhuleu, Guatemala (L. Thiel).

Genus EUCLEA Hubner

Euclea cassida, new species

Fore wing with light yellow ground, the scales suberect and thin; blotched with blackish, especially at base, and defining a pale pinkish patch between the subapical silver dots and subbasal strongly waved line; no discal dot visible. Expanse, male, 23-24 mm.

Two males, Type No. 40687, U. S. Nat. Mus., Amathura and Caicara, Amazonas, Brazil (Dognin Collection).

Genus TALIMA Walker

Talima sissypha, new species

As in *straminea* Schaus, but the whole wing darkened with purple-brown; inner and outer margins darker. Expanse, male, 21 mm.

One male, Type No. 40688, U. S. Nat. Mus., San Sebastian, Retalhuleu, Guatemala (L. Thiel).

Talima varians, new species

As in *flexilinea* Dyar the fore wing light purple brown, darker shaded at base; veins outwardly dark, crossing the slender flexuous outer line; apex broadly dark purple-brown beyond the line; hind wing rather pale stramineous, with a purple area across the middle. Expanse, female 23 mm.

One female, Type No. 40689, U. S. Nat. Mus., Venezuela (Dognin Collection).

Talima merilone, new species

Like *emilia*; larger, the fore wing heavily suffused, the veins not lined; a round clouded discal area. Expanse, male, 22-23 mm.

Two males, Type No. 40690, U. S. Nat. Mus., Colombia: Micay, August, 1896; Pueblo Rico, San Juan Choco, 5200 feet alt., September, 1909 (Dognin Collection).

Talima insulla, new species

Like *sulla* Schaus, but the outer dark line absent, replaced by a narrow pale yellow shaded line, which is rather faint in the male, distinct in the female. Expanse, male, 20 mm., female, 26 mm.

Two males, one female, Type No. 40691, U. S. Nat. Mus.; Type No. 857, Cornell Univ. Coll., below Codajos, Rio Solimões, Brazil, September 6, 1920 (Cornell Univ. Exp.).

Genus MONOLEUCA Grote & Robinson.

Monoleuca angustilinea, new species

Fore wing uniform red-brown; silvery line erect, sulphur-yellow tinted, narrow, slightly oblique, entering cell before origin of vein 2, preceded by faint reddish. Expanse, female, 23 mm.

One female, Type No. 40692, U. S. Nat. Mus., Capron, Florida, March 23 (H. G. Hubbard).

Genus SISYROSEA Grote

Sisyrosea brusha, new species

Fore wing dark purplish brown, sparsely sprinkled with black scales; hind wing distinctly blackish. Expanse, male, 20 mm.

Two males, Type No. 40693, U. S. Nat. Mus., Jalapa, Mexico (W. Schaus) Godeberi, Maroni River, French Guiana (Le Moulton).

Genus *NATADA* Walker

Natada styx, new species

Like *deba*; darker brown, the lines obscure, divergent below; hind wing blackish. Expanse, male, 25 mm.

One male, Type No. 40694, U. S. Nat. Mus., Yahuar Mayo, Peru, April, 1912 (Dognin Collection).

Natada ulaula, new species

Like *michorta*; larger, darker, the indicated transverse lines farther apart and less numerous. Expanse, male, 30 mm.

One male, Type No. 40695, U. S. Nat. Mus., Medina, Colombia, 500 m. alt. (A. H. Fassl).

Genus *PEROLA* Walker

Perola prosper, new species

Fore wing white, overlaid with olive brown, leaving a broad submarginal white band with rather irregular edges; white mottlings about cell and marginally; a dark dot in base of cell and large discal spot. Hind wing whitish. Expanse, male, 24-25 mm.

Three males, Type No. 40696, U. S. Nat. Mus.; Type No. 856, Cornell Univ. Coll., "Lassance," Minas Geraes, Brazil, November 9, 1919 (Cornell Univ. Exp.).

Perola subpunctella, new species

Like *subpunctata* Walk.; smaller. Expanse, male, 20-22 mm.

Seven males, Type No. 40697, U. S. Nat. Mus., Castro, Paraná, Brazil, (E. D. Jones); Villa Rica, Paraguay, February 9, 1921 (C. Jorgensen).

Genus *ALARODIA* Möscher

Alarodia minuscula, new species

White, without markings; fore wing below smoky shaded, darkest along costa. Expanse, male, 11 mm.

One male, Type No. 40698, U. S. Nat. Mus., Matanzas, Cuba, November, 1902 (W. Schaus).

Genus *SEMYRA* Walker

Semyra erna, new species

Markings of *eucharista*, but darkened, the silvery bar more distinct; hind wing blackish brown. Expanse, male, 17-19 mm.

Four males, Type No. 40699, U. S. Nat. Mus., Villa Rica, Paraguay (F. Schade).

Semyra lucilla, new species

Markings of *gladys*, the whole wing dark purple-brown, the spots distinct, although not contrasted. Hind wing brownish black. Expanse, male, 25 mm.

One male, Type No. 40700, U. S. Nat. Mus., Venezuela (Dognin Collection).

Genus ISOCHAETES Dyar

Isochaetes ashtabel, new species

Fore wing dark purple brown, hind wing bronzy black; some rufous patches basally; a black highly angled zig-zag line crossing the wing centrally, rufous-edged without, and below the median vein forming a deep excavation; a dark outer line excurved over cell inclosing a curved pale space at end of cell, which is ovate in its upper half, obscured except for two whitish patches below. Expanse, male, 18 mm., female, 26 mm.

Male and female, Type No. 40701, U. S. Nat. Mus.; Type No. 855, Cornell Univ. Coll., male, Molinas, Paraguay, October, 1925 (F. Schade), female, Rockstone, Essequibo River, British Guiana, June, 1927 (Cornell Univ. Exp.).

Genus VENADICODIA Dyar

Venadicodia ruthaea, new species

Fore wing brownish; basal space dark brown; a darker oblique bounding line from costa before middle to inner margin beyond middle; a little whitish in its irregular outer edge; outer area light brown; a small brown patch at apex, continued narrowly along termen. Hind wing blackish brown. Expanse, male, 18 mm.

One male, Type No. 40702, U. S. Nat. Mus., without locality (Schaus Collection).

Family DALCERIDAE

Genus DALCERA Herrich-Schäffer

Dalcera consanguinea, new species

Fore wing pale purple, shading to blackish outwardly; costal margin, inner and outer margins narrowly, pale yellow. Hind wing orange yellow with a narrow outer black border, in width less than one-fourth the length of the wing. Expanse, male, 39-45 mm.

Two males, Type No. 40713, U. S. Nat. Mus., Rio Tapajoz, Amazonas, Brazil; Porto Velho, Rio Madeira, Brazil (Dognin Collection).

Perhaps not distinct from *Dalcera semirufa* Druce, which I know only by description.

Genus ACRAGA Walker

Acraga perbrunnea, new species

Dark purple, uniform, the hind wings apparently of the same color, though badly denuded in the specimen. Expanse, male, 25 mm.

One male, Type No. 40714, U. S. Nat. Mus., Oxapampa, Peru, 2000 m. alt. (Dognin Collection).

Genus ANACRAGA Dyar

Anacraga citrinopsis, new species

Color of *citrina* Schaus, but considerably larger. Expanse, male, 25 mm.

One male, Type No. 40715, U. S. Nat. Mus., Callao, Peru (Mrs. M. J. Pusey).

Anacraga ingenesens, new species

Fore wing dull golden yellow, color of *ria* Dyar (*luteola* Hopp); hind wing pale yellow, more golden on the margin. Expanse, female, 32 mm.

One female, Type No. 40716, U. S. Nat. Mus., Merida, Venezuela (Dognin Collection).

Anacraga sororcula, new species

Like *sofia* Dyar, smaller, most of the wing markings except the discal dot faint and obsolescent. Expanse, male, 12 mm., female, 16-17 mm.

Four males, two females, Type No. 40717, U. S. Nat. Mus., Cayuga, Guatemala, May, September, October (Schaus & Barnes); Misantla, Mexico, September, 1910 (R. Müller).

Anacraga phasma, new species

White faint yellowish clouded markings on lower half of wing; no discal dot. Expanse, female, 17 mm.

One female, Type No. 40718, U. S. Nat. Mus., Venadio, Sinaloa, Mexico (A. Kutsche).

Genus PROTACRAGA Hopp

Protacraga nigerella Dognin

Dognin's *Dalcera nigerella* is apparently the male of Hopp's *Protacraga micans*.

Genus MINONOA Dyar

Contains the following species:

Minonoa perbella Schaus (genotype)**Minonoa variegata** Jones (*Dalcera variegata* Jones)

I have not examined specimens of this species, but feel sure from the wing shape and pattern of coloration that it will find place in this genus.

Minonoa elvira Dognin (*Acraga elvira* Dognin)

Dognin's types are before me. The disparity in the sexes in color and even pattern of markings is remarkable.

SCIENTIFIC NOTES AND NEWS

The annual series of lectures representative of the work of the Carnegie Institution of Washington was given in November and December, and included the following: November 15, OSCAR RIDDLE, *Internal secretions in evolution and reproduction*; November 22, J. P. AULT, *Purpose and progress of ocean surveys*; November 29, REMINGTON KELLOGG, *History of whales—their adaptation to life in the sea*; November 30, S. G. MORLEY, *Excavations at Chichen Itza, Yucatan, Mexico, and at Uaxactun, Peten, Guatemala, in 1927* (presented at the Bureau of American Republics); December 6, WALTER S. ADAMS, *The interior of a star and how it maintains its life*. The annual reception and exhibit of apparatus and methods was held on December 9.